DOCUMENT RESUME

ED 382 240 JC 950 211

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TITLE	Examination of the Learning and Psycho-Social Skills Needed by and Barriers for Remedial Students at Mercer County Community College.
INSTITUTION	Mercer County Community Coll., Trenton, N.J.
PUB DATE	Nov 94
NOTE	35p.
PUB TYPE	Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Academic Achievement; *Basic Skills; Community Colleges; Educational Needs; Full Time Faculty; *High Risk Students; Part Time Faculty; Questionnaires; *Remedial Teachers; *Teacher Attitudes; Thinking Skills; Two Year Colleges; *Two Year College Students
IDENTIFIERS	Mercer County Community College NJ

ABSTRACT

An exploratory study was conducted at Mercer County Community College to identify the skills needed and external barriers suffered by most remedial students enrolled at the college, and to develop a preliminary ranking of these skills and barriers according to their perceived importance by faculty. A survey instrument identifying 26 learning skills, 25 psycho-social skills, and 16 psycho-social and external barriers was administered to a sample of 57 remedial instructors. The survey received an 80% response rate from full-time faculty, and a 64% response rate from part-time instructors. Study findings included the following: (1) over 75% of the faculty indicated that most of their students lacked skills in analyzing, comprehending, explaining, focusing, retaining over time, outlining, synthesizing, generalizing, framing answers, verifying, integrating, summarizing, and framing questions; (2) when asked to select the skills which needed immediate attention, more than 50% of the respondents selected only five; i.e., analyzing, focusing, comprehending, retaining over time, and integrating; (3) over 92% of the faculty indicated that most of their students needed good study habits, notetaking, time management skills, knowing what to study, and perseverance, and over 50% indicated that these areas and, additionally, the skill of knowing when help is needed, should get immediate attention; (4) the most significant barriers to academic success were perceived to be employment demands, family and domestic demands, time to study, and child care; and (5) there were some significant differences in the ways in which full- and part-time faculty perceived their students' needs. (Contains 25 references.) (KP)

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EXAMINATION OF THE LEARNING AND PSYCHO-SOCIAL SKILLS NEEDED BY AND BARRIERS FOR REMEDIAL STUDENTS AT MERCER COUNTY COMMUNITY COLLEGE

by

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November, 1994

Abstract

The problem under investigation was the academic non-success experienced by many remedial students enrolled at Mercer County Community College (MCCC). The purpose of the study was to identify and to rank the skills needed and barriers suffered by most remedial students using the perceptions of faculty members.

The study was exploratory and guided by operant research questions. A survey instrument was developed and administered to 57 faculty members, 39 of whom returned completed surveys. A variation ratio analysis was applied to the aggregate measurement of faculty responses.

Research results supported the following conclusions: (a) faculty members are able to identify specific skills needed by most of the students whom they instruct, (b) faculty members are able to identify specific barriers to the academic success of most of their students, (c) it is possible to rank the overall and significant skill needs and barrier-situations for most remedial students by applying a variation ratio analysis to an aggregate measurement of faculty responses, and (d) there are clear differences in majority perception among part-time faculty members and full-time faculty members with respect to the skills needs of and barrier situations confronted by most remedial students.

INTRODUCTION

In the United States of America (USA), higher education has had a history of dramatic importance to the people (Cremin, 1977). Through its colleges and universities, the USA has been able to produce an open society supported by well-educated professionals, business people; and states-persons. The more success which higher education has had, the more the public has depended upon it to bring positive change and growth to the USA (Cohen & Brawer, 1989).

Today, the majority of colleges and universities receives public support in the form of direct formula funding, grants, and financial aid for students (Altbach & Berdahl, 1981). For this support, the people expect higher education to help solve social issues and to move the country forward to a rewarding destiny and "the good life" for the people (Parnell, 1991).

Nature of the Problem

If higher education is the gateway to positive change and "the good life," it must provide open access and an educational environment which promotes student success. Over the last two decades, a lot of energy has been put into producing developmental, learning systems for improving the writing, reading, and mathematics of students who come to college unprepared to complete college-level studies. While the commitment of most institutions, especially community colleges, toward remedial students has been unquestionable and exhaustive, many remedial students still have revolving-door experiences.

Purpose of the Study

The purpose of this study was (a) to identify the learning skills and psycho-social skills needed and psycho-social and external barriers suffered by most remedial students and (b) to develop a preliminary ranking of these skills and barriers according to their perceived importance by faculty respondents. The study was, therefore, exploratory in nature.

Significance to Mercer County Community College

Mercer County Community College (MCCC) is an open

access, coeducational, public, two-year college. Its credit student enrollment averages 12,000 annually with 3,500 full-time students and 8,500 part-time students. Over 50% of the full-time students and 35% of the part-time students need one or more remedial courses in reading, writing, and/or mathematics.

If this study can identify the learning skills and psycho-social skills needed by most remedial students and the psycho-social and external barriers which affect the success rate of most remedial students, several important outcomes will follow. First, MCCC will be able to focus its limited resources on providing educational experiences and services to meet these needs. Second, more remedial students will complete the remedial program successfully and stay enrolled at MCCC. Third, more remedial students will complete degree programs. Fourth, MCCC will be more successful in fulfilling its open-door mission.

Research Questions

Because the research was exploratory in nature, the formulation of hypotheses was not appropriate. The research was guided by the focused (operant) research questions which are presented below.

1. What learning skills and psycho-social skills will the majority (more than 50%) of faculty respondents identify as being needed by most of the remedial students whom they instruct?

2. What skills will the majority (more than 50%) of faculty respondents identify as the significant learning skills and psycho-social skills needed by most of the remedial students whom they instruct?

3. What psycho-social and external barriers to educational success will the majority (more than 50%) of faculty respondents identify as affecting most of the remedial students whom they instruct?

4. What psycho-social and external barriers to educational success will the majority of faculty respondents identify as significantly affecting most of the remedial students whom they instruct?

5. Do the majority (more than 50%) of full-time faculty respondents and the majority (more than 50%) of part-time

faculty respondents perceive different needed learning skills, needed psycho-social skills, and psycho-social and external barriers for most of the remedial students whom they instruct?

6. Do the majority of full-time faculty respondents and the majority of part-time faculty respondents perceive different significant learning skill needs, psycho-social skill needs, and psycho-social and external barriers for most of the remedial students whom they instruct?

Definition of Terms

For the purpose of this study, external barriers are defined as negative situations over which a remedial student can exercise only limited control. Such external barriers are bus schedules, employment demands, and limited funds.

Learning skills are defined as mental processes which a student must use to complete a subject matter assignment and/or to arrive at an accurate solution to a posed problem. Such learning skills include classifying, memorizing, and gathering evidence.

Psycho-social skills are defined as personal and social tools which a student uses to complete a subject matter assignment, to arrive at an accurate solution to a posed problem, to prepare for the successful completion of an examination, and to perform the role of student. Such psycho-social skills include asking questions, taking notes, knowing when help is needed, and handling failure.

Psycho-social barriers are defined as dysfunctional attributes and/or social situations which are faced by a remedial student in his/her pursuit of a successful learning experience. Such psycho-social barriers include disability, religious dilemma, and family and domestic demands. Lastly, "need" is defined as an absence or minimal level of a specific skill or a certain life situation among most remedial students as perceived by a faculty respondent.

LITERATURE REVIEW

Higher education in the United States, has had a long history of growing public service to the society and its citizens (Good, 1960). From colonial times through the nineteenth century, most colleges and universities focused

on turning young men, age twelve through the twenties, into gentlemen and professionals of one sort or another (Good, 1960). Students were considered as rough stones to be shaped with academic and social discipline. This discipline took the form of in locus parentis, training in pre-college skills and contents, and training in college-level subjects (Brubacher & Rudy, 1958). All academic training was based on the discipline of memorizing and reciting (Pulliam, 1982).

In the latter part of the nineteenth century, with the acceptance of the German model of the research university and the establishment of land-grant institutions, leaders in higher education began to consider student preparation for college and the role of higher education (Flexner, 1930). The result was the establishment of a public, postsecondary system of education which would prepare students for college-level study (Pulliam, 1982). The latent function of the new postsecondary system was, also, to separate out those students who were not "college material" (Pound, 1968). With the establishment of public, postsecondary education, college leaders believed that the problem of remedial students was solved (Conant, 1967). This solution did work fairly well, until the 1960's (Cross, 1976).

Beginning in the 1960's, several social changes forced the consideration of new potential students for higher education. First, the number of traditional college students dropped, causing many institutions to open their doors to nontraditional students (Roueche & Roueche, 1993). Second, the shift from an industrial economy to a service and information economy has eliminated many blue-collar and lower-level white-collar jobs (Brock, 1991). Workers need high-technological training to compete effectively in the evolving, post-industrial economy (Kent, 1991). Third, American society has turned to higher education to provide the necessary training for all of its citizens (Gardner, 1993).

The development of the community college movement has provided higher education with open-access colleges (Parnell, 1991). In an open access model, motivation is stressed as the key prerequisite for success in higher education (Walleri, Seybert & Cosgrove, 1992). The academic skills and content necessary for the successful completion of college-level courses and programs have become the responsibility of the college itself (Zins et al., 1988). In this new model, the college is responsible for providing the courses and supports needed by students (Fradlin &

Hisle, 1993; Wolfe, 1993). The discipline of academic study -- in classical terms, the discipline of the classroom, professor, or subject matter -- is no longer all that is needed for student success (Franke, 1991-92). The personal, social, economic, and learning needs of the students become equally important (Katsinas & Swender, 1992; Barr, Keating & Associates, 1990). Evidence is accumulating that these pre-academic needs are in some ways more powerful determiners of whether remedial students will succeed or fail in college than are the traditional academic skill needs of reading, writing, and mathematics (Nielsen, 1991; Cohen & Brawer, 1989).

Most case studies on remedial programs and remedial students have focused on the assessment of higher-order skills (or what could be called outcome skills, e.g. reading, writing, and mathematics), teaching techniques, and attitudinal comments from students. Three, good examples of such studies are the Howard Community College Outcomes Project (Howard Community College, 1991), Clackamas Community College Alternative Program (Kempner & Connett, 1990), and Tompkins Cortland Community College PACE Program (Lieberman & Vaugon, 1990).

No recent studies have focused on the general educational process skills -- learning skills and psycho-social skills -- needed by most remedial students. Also, no recent studies have looked into the psycho-social and external barriers which may be impeding the success of remedial students. With the exception of some individualized learning programs which still use behavioral objectives as their basis, most remedial programs appear to place the development of learning skills and psycho-social skills, and the removal of psycho-social and external barriers under an umbrella of intensive tutoring, counseling, modeling, and tracking services (Kempner & Connett, 1990; Lieberman & Vaugon, 1990).

METHODOLOGY AND PROCEDURES

The study used a research methodology. A survey instrument was constructed and completed by a sample of full-time and part-time faculty members who were assigned remedial courses at MCCC during the 1993-1994 academic year.

Survey Instrument

The instrument for this study was constructed by a panel of five experts. Each panelist has had a minimum of 15 years of experience in the community college movement.

Each panelist developed a preliminary list of general, educational skills which (s)he believed that remedial students needed to complete remedial courses and to become successful college-level students. In addition, each panelist developed a list of potential barriers to remedial student success.

Through a series of meetings, the panel developed three categories: learning skills, psycho-social skills, and psycho-social and external barriers. Using a consensus model, the panel agreed on 26 learning skills, 25 psycho-social skills, and 16 psycho-social and external barriers.

The survey instrument was drafted with two, close-ended options for each item. Option one was to be checked by the respondent if (s)he perceived that the skill or barrier affected most of the remedial students whom (s)he instructed. Option two was to be checked if the respondent considered the skill or barrier to be significant (a skill or barrier which required the most immediate attention). Additionally, to provide respondents with the opportunity to identify and to rate a skill or barrier not presented on the instrument, two "other" items were added under each of three subdivisions of the survey instrument.

The draft of the survey instrument was submitted to the Office of Institutional Research and Evaluation at MCCC and to two secondary-school teachers of English for their review. Their edits were reviewed by the panel and incorporated into the final survey instrument. A copy of the instrument is in the Appendix.

Data Collection

The target population included all the faculty members who were employed by Mercer County Community College and assigned remedial reading, writing, and mathematics courses for academic year 1993-1994. The population totaled 57 faculty members, 15 full-time faculty members and 42 part-time faculty members. The sample goals were 80% of the full-time faculty members and 60% of the part-time faculty members, which would net a sample of 12 full-time faculty

members and 19 part-time faculty members.

The study and its purpose were introduced to the faculty members at a regularly scheduled meeting of the Academic Skills Division. Suryey instruments were distributed to faculty members through their mailboxes and collected within seven, working days. As a follow-up procedure, those faculty members who did not return survey instruments were given a second opportunity to participate in the study.

A total of 39 faculty members returned completed questionnaires: 12 full-time faculty members and 27 part-time faculty members. The goal of an 80% return rate for full-time faculty members was attained. The goal of a 60% return rate for part-time faculty members was surpassed. Part-time faculty members had a return rate of 64%.

Data Analysis

The data were tabulated and placed into preliminary tables by total sample and sub-samples using the independent variable of status group (full-time faculty members and part-time faculty members). Final tables for each category -- learning skills, psycho-social skills, and psycho-social and external barriers -- were constructed with raw number totals and percentages.

Variation ratio analysis was used in the study. This method of analysis is the best for achieving a descriptive ranking of (a) the needed skills and existing barriers which respondents perceived as affecting most remedial students and (b) the needed skills and existing barriers which respondents perceived as significant (requiring immediate attention) for most remedial students. The minimum limit established for the variation ratio analysis was "more than 50%."

Percentage tables of learning skill needs, psycho-social skill needs, and psycho-social and external barriers identified by more than 50% of the respondents were constructed. These tables are used in the presentation of the study's results.

Assumptions

Three assumptions have been made. First, there is no

systematic error in the sample of faculty members who cooperated in the study by completing survey instruments.

Second, faculty respondents have completed their survey instruments honestly. During the data collection phase of the study, no evidence of dishonesty was apparent. Many of the respondents showed genuine interest in the results of the study.

Third, the faculty members who participated in the study know the needs of their students. There is a question as to whether faculty members or the students themselves are better at identifying student needs. In this case, however, faculty members are assumed to be able to identify and articulate the educational needs of students better than the students themselves are able to do.

Limitations

The study has two, procedural limitations. First, the survey instrument was constructed and validated using a panel of experts and not through field testing. Time and resources were limited.

Second, the survey instrument constructed for the study permits only nominal-scale measurement and analysis. The researcher believes that these limitations are acceptable within an exploratory framework.

RESULTS

The results are divided into two sections: total sample (all faculty respondents) results and the comparison of sub-sample (full-time faculty respondents and part-time faculty respondents) results. Under each section, results are separated by category -- learning skills, psycho-social skills, and psycho-social and external barriers.

Analysis of results is by variation ratio (percentages). Only those needed skills and existing barriers which were selected by more than 50% of the respondents are recorded in the sections presented below.

Total Sample Results

Table 1 presents the learning skills which more than 50% of the respondents considered as needed by most of the remedial students whom they instructed. All 26 learning skills presented in the survey instrument were perceived by more than 50% of the respondents as needed by most of the remedial students whom they instructed.

Table 1: Learning Skill Needed By Most Remedial Students As Perceived By The Majority Of Faculty Respondents (n = 39)

Percentage of respondents	Learning skill needed by most remedial students
92.31	Analyzing
92.31	Comprehending
92.31	Explaining
89.74	Focusing
89.74	Retaining over time
84.62	Outlining
84.62	Synthesizing
82.05	Generalizing
79.49	Framing answers
79.49	Verifying
76.92	Integrating
76.92	Summarizing
76.92	Framing questions
74.36	Brainstorming
74.36	Exploring
71.79	Combating irrational ideas
71.79	Defending
69.23	Memorizing
66.67	Gathering evidence
64.10	Acting on reasoned opinion
64.10	Challenging
64.10	Creating
58.97	Judging truth
58.97	Judging values
56.41	Discriminating
51.28	Classifying

The top learning skills were "analyzing," "explaining," "comprehending," "focusing," and "retaining over time." These learning skills were identified as needed by more than 89% of the respondents.

When asked to select the needed skills which required immediate attention for most remedial students, more than 50% of the respondents selected only five learning skills. See Table 2 below.

Table 2: Significant Learning Skill Needs Of Most Remedial Students As Perceived By The Majority Of Faculty Respondents (n = 39)

Percentage of respondents	Significant learning skill need of most remedial students
69.23	Analyzing
66.67	Focusing
64.10	Comprehending
56.41	Retaining over time
53.85	Integrating

Four of the top, needed skills in Table 1 were selected as significant skill needs by more than 50% of the respondents. In addition, "integrating" made the list of significant skill needs.

Table 3 presents the psycho-social skills which the majority of respondents considered as needed by most of the remedial students whom they instructed. See Table 3 on page 12.

Table 3: Psycho-Social Skill Needed By Most Remedial Students As Perceived By The Majority Of Faculty Respondents (n = 39)

Percentage of respondents	Psycho-social skill needed by most remedial students
97.44	Good study habits
95.53	Notetaking
95.53	Time management
95.53	Knowing what to study
92.31	Perseverance
87.18	Knowing when help is needed
84.62	Asking questions
82.05	Test-taking
76.92	Effective verbal communication
76.92	Self-confidence
74.36	Following directions
74.36	Understanding of task or job
71.79	Adjusting to role of student
69.23	Information sorting
69.23	Knowing where to get help
64.10	Well-developed goals
64.10	Networking
61.54	Handling failure
58.97	Stress management
58.97	Achievement orientated
53.85	Self-control
53.85	Self-evaluation
51.28	Acceptance of givens

Twenty-three (23) out of the 25 psycho-social skills presented in the survey instrument were perceived by more than 50% of the respondents as needed by most of the remedial students whom they instructed. The top psycho-social skill needs were "good study habits," "notetaking," "time management," "knowing what to study," and "perseverance." These psycho-social skills were identified as needed by more than 92% of the respondents.

When asked to select the skill needs which required immediate attention for most remedial students, more than 50% of the respondents selected only six psycho-social skills. See Table 4 on page 13.

Table 4: Significant Psycho-Social Skill Need Of Most Remedial Students As Perceived By The Majority Of Faculty Respondents (n = 39)

Percentage of respondents	Significant psycho-social skill need of most remedial students
79.49	Good study habits
66.67	Time management
64.10	Knowing what to study
61.15	Notetaking
58.97	Perseverance
51.28	Knowing when help is needed

The five, top skill needs in Table 3 were selected as significant skill needs by more than 50% of the respondents. In addition, "knowing when help is needed" made the list of significant skills needs.

Table 5 presents the psycho-social and external barriers which more than 50% of the respondents considered were encountered by most of the remedial students whom they instructed. Seven out of the 16 psycho-social and external barriers presented in the survey instrument were perceived by more than 50% of the respondents as being encountered by most of the remedial students whom they instructed.

The top three psycho-social and external barriers were "time to study," "employment demands," and "family and domestic demands." These psycho-social and external barriers were identified by more than 74% of the respondents. See Table 5 on page 14.

Table 5: Psycho-Social And External Barriers To The Academic Success Of Most Remedial Students As Perceived By The Majority Of Faculty Respondents (n = 39)

Percentage of respondents	Barrier to the academic success of most remedial students
79.49	Time to study
76.92	Employment demands
74.36	Family and domestic demands
66.67	Car problems
66.67	Child care
64.10	Limited funds
53.85	Vague career plans

When asked to select the psycho-social and external barriers which required immediate attention for most remedial students, more than 50% of the respondents selected four barriers. The three, top barriers in Table 5 were selected as significant barriers encountered by most remedial students by more than 50% of the respondents. In addition, "child care" made the list of significant barriers. See Table 6 below.

Table 6: Significant Psycho-Social And External Barriers To The Academic Success Of Most Remedial Students As Perceived By The Majority Of Faculty Respondents (n = 39)

Percentage of respondents	Significant barrier to the academic success of most remedial students
58.97	Employment demands
58.97	Family & domestic demands
56.41	Time to study
53.85	Child care

Comparison of Sub-Sample Results

Table 7 presents a comparison of the learning skills which the majority of full-time faculty respondents and the majority of part-time faculty respondents perceived as needed by most of the remedial students whom they taught.

Table 7: Learning Skill Needed By Most Remedial Students As Perceived By The Majority Of Full-Time Faculty Respondents And The Majority Of The Part-Time Faculty Respondents: A Comparison Of Perceptions (FTn = 12; PTn = 27)

Percent of respondents FT Faculty	PT Faculty	Learning skill needed by most remedial students
100.00	80.00	Analyzing
100.00	70.00	Outlining
91.67	60.00	Brainstorming
91.67	50.00	Gathering evidence
91.67	70.00	Generalizing
91.67	63.33	Summarizing
91.67	73.33	Synthesizing
91.67	56.67	Defending
91.67	60.00	Exploring
83.33	83.33	Focusing
83.33	60.00	Combating irrational ideas
83.33	86.67	Comprehending
83.33	86.67	Explaining
83.33	66.67	Integrating
83.33	70.00	Verifying
83.33	66.67	Framing questions
75.00		Discriminating
75.00	73.33	Framing answers
66.67	90.00	Retaining over time
66.67	56.67	Acting on reasoned opinion
66.67	56.67	Challenging
66.67	56.67	Creating
58.33		Classifying
58.33	66.67	Memorizing
58.33	53.33	Judging truth
	56.67	Judging values

While the majority of the full-time faculty respondents perceived 25 out of the 26 learning skills as needed by most of the remedial students whom they instructed, the majority of part-time faculty respondents considered 24 out of the 26 learning skills as needed by most of the remedial students whom they instructed.

The majority of full-time faculty respondents did not consider "judging values" as an important need of most remedial students as did the majority of part-time faculty respondents. The majority of part-time faculty respondents did not consider "discriminating" and "classifying" as important needs of most remedial students as did the majority of full-time faculty respondents.

When asked to select the significant skill needs (those requiring immediate attention) for most remedial students, the majority of full-time faculty respondents selected seven learning skills while the majority of part-time faculty respondents considered four learning skills. Only two learning skills -- "analyzing" and "comprehending" -- were selected by the majority of both sub-samples. See Table 8.

Table 8: Significant Learning Skill Needs Of Most Remedial Students As Perceived By The Majority Of Full-Time Faculty Respondents And The Majority Of Part-Time Faculty Respondents: A Comparison Of Perceptions (FTn = 12; PTn = 27)

Percent of respondents FT Faculty	PT Faculty	Significant learning skill need of most remedial students
66.67	63.33	Analyzing
66.67		Synthesizing
66.67		Integrating
66.67		Exploring
58.33	60.00	Comprehending
58.33		Creating
58.33		Gathering evidence
	66.67	Focusing
	56.67	Retaining over time

The majority of full-time faculty respondents did not consider "focusing" and "retaining over time" as significant needs of most remedial students as did the majority of part-time faculty respondents. The majority of part-time faculty respondents did not consider "synthesizing," "integration," "exploration," "creating," and "gathering evidence" as significant skills needs of most remedial students as did the majority of full-time faculty respondents.

Table 9 presents a comparison of the psycho-social skills which the majority of full-time faculty respondents and the majority of part-time faculty respondents perceived as needed by most of the remedial students whom they instructed. See Table 9.

Table 9: Psycho-Social Skill Needed By Most Remedial Students As Perceived By The Majority Of Full-Time Faculty Respondents And The Majority Of Part-Time Faculty Respondents: A Comparison Of Perceptions (FTn = 12; PTn = 27)

Percent of respondents FT Faculty	PT Faculty	Psycho-social skill needed by most remedial students
100.00	83.33	Notetaking
100.00	83.33	Knowing what to study
91.67	90.00	Good study habits
91.67	70.00	Asking questions
91.67	76.67	Knowing when help is needed
91.67	63.33	Effective verbal communication
83.33	60.00	Adjusting to role of student
83.00	86.67	Perseverance
83.33	90.00	Time management
83.33	56.67	Information sorting
75.00	60.00	Knowing where to get help
75.00	66.67	Understanding of task or job
75.00	53.33	Networking
75.00	76.67	Test-taking
66.67		Stress management
66.67	70.00	Following directions
66.67	53.33	Handling failure

(table continues on page 18)

Table 9: Continued

Percent of respondents FT Faculty	PT Faculty	Psycho-social skill needed by most remedial students
66.67	56.67	Well-developed goals
66.67	73.33	Self-confidence
66.67		Self-control
58.33		Acceptance of givens
58.33	53.33	Achievement orientated
58.33		Active orientation
58.33		Self-evaluation

While the majority of the full-time faculty respondents perceived 24 out of the 25 psycho-social skills as needed by most of the remedial students whom they instructed, the majority of part-time faculty respondents considered 19 out of the 25 psycho-social skills as needed by most of the remedial students whom they instructed. The majority of part-time faculty respondents did not consider "stress management," "self-control," "acceptance of givens," and "self-evaluation" as important needs of most remedial students as did the majority of full-time faculty respondents.

When asked to select the significant skill needs (those requiring immediate attention) for most remedial students, the majority of full-time faculty respondents selected seven psycho-social skills while the majority of part-time faculty respondents considered five psycho-social skills. Four psycho-social skills -- "good study habits," "time management," "notetaking," and "knowing what to study" -- were selected by the majority of both sub-samples. See Table 10 on page 19.

Table 10: Significant Psycho-Social Skill Needs Of Most Remedial Students As Perceived By The Majority Of Full-Time Faculty Respondents And The Majority Of The Part-Time Faculty Respondents: A Comparison Of Perceptions (FTn = 12; PTn = 27)

Percent of respondents FT Faculty	PT Faculty	Psycho-social skill needed by most remedial students
83.33	70.00	Good study habits
66.67	60.00	Time management
66.67	53.33	Notetaking
66.67	56.67	Knowing what to study
66.67		Knowing when help is needed
66.67		Effective verbal communication
58.33		Following directions
	56.67	Perseverance

The majority of full-time faculty respondents did not consider "perseverance" as a significant need of most remedial students as did the majority of part-time faculty respondents. The majority of part-time faculty respondents did not consider "knowing when help is needed," "effective verbal communication," and "following directions" as significant skill needs of most remedial students as did the majority of full-time faculty respondents.

Table 11 presents a comparison of the psycho-social and external barriers which the majority of full-time faculty respondents and the majority of part-time faculty respondents perceived as encountered by most of the remedial students whom they instructed. See Table 11 on page 20.

Table 11: Psycho-Social And External Barriers To The Academic Success Of Most Remedial Students As Perceived By The Majority Of Full-Time Faculty Respondents And The Majority Of Part-Time Faculty Respondents: A Comparison Of Perceptions (FTn = 12; PTn = 27)

Percent of respondents FT Faculty	PT Faculty	Barrier to the academic success of most remedial students
75.00	66.67	Family & domestic demands
75.00	70.00	Employment demands
66.67	60.00	Car problems
66.67	76.67	Time to study
58.33	60.00	Limited funds
58.33		Place to study
	70.00	Child care

The majority (more than 50%) of the full-time faculty respondents perceived six out of the 16 psycho-social and external barriers as encountered by most of the remedial students whom they instructed as did the majority of part-time faculty respondents. The majority of full-time faculty respondents did not consider "child care" as an important barrier encountered by most remedial students as did the majority of part-time faculty respondents. The majority of part-time faculty respondents did not consider "a place to study" as important barrier for most remedial students as did the majority of full-time faculty respondents.

When asked to select the significant skill needs for most remedial students, the majority of full-time faculty respondents selected only one external barrier while the majority of part-time faculty respondents considered two external barriers. No common psycho-social and external barriers were selected by the majority of both sub-samples. See Table 12 on page 21.

Table 12: Significant Psycho-Social And External Barriers To The Academic Success Of Most Remedial Students As Perceived By The Majority Of Full-Time Faculty Respondents And The Majority Of Part-Time Faculty Respondents: A Comparison Of Perceptions (FTn = 12; PTn = 27)

Percent of respondents FT Faculty	PT Faculty	Barrier to the academic success of most remedial students
58.33		Time to study
	56.67	Employment demands
	60.00	Family & domestic demands

The majority of full-time faculty respondents did not consider "employment demands" and "family and domestic demands" as significant barriers for most remedial students as did the majority of part-time faculty respondents. The majority of part-time faculty respondents did not consider "time to study" as a significant barrier for most remedial students as did the majority of full-time faculty respondents.

DISCUSSION

Through the summation of the responses received from the faculty members who participated in the study, it was possible to develop a ranking of the learning skills and psycho-social skills which the majority of faculty respondents believed were needed by most of the remedial students whom they instructed. Also, it was possible to develop a ranking of the significant learning skill needs and psycho-social skill needs of most remedial students. While the majority of faculty respondents selected most of the learning skills and psycho-social skills presented to them on the survey as needed by most of the remedial students whom they instructed, the majority of respondents selected a much shorter list of skill needs that were signficant needs, i.e. needs requiring immediate attention if remedial students are to be successful in completing their studies.

Much of the literature on open access and non-traditional students has focused on psycho-social and external barriers to educational success among remedial students. To address this issue, the survey included a section on psycho-social and external barriers. The majority of faculty respondents did not select very many of the barriers as suffered by most of the remedial students whom they instructed. Of the barriers selected, most were external barriers. Of the significant barriers selected, the majority of faculty respondents focused on the problem of limited time to devote to studies.

In this study the sub-sample of part-time faculty members was 2.25 times larger than the sub-sample of full-time faculty members. To address the possibility that differences in perceived student needs between full-time faculty and part-time faculty could be masked in the total sample findings by the larger part-time faculty sub-sample, responses were categorized by sub-sample (full-time faculty and part-time faculty).

Through this presentation of data, it was found that, while the majority of each sub-sample did tend to select the same skill needs for most of the remedial students whom they instructed, there were differences in ranking, as determined by percentage of responses. The absolute percentage difference between sub-sample rankings ranged from 41.67% to 0.00% in the learning skills category, 28.34% to 1.67% in the psycho-social skills category, and 31.67% to 0.00% in the psycho-social and external barriers category.

The majority of full-time faculty respondents selected a substantially different and larger sets of significant learning skill needs and psycho-social skill needs than the majority of part-time faculty respondents. In both categories of general, educational skill needs, the significant needs selected exclusively by the majority of full-time faculty respondents required more learner sophistication than those selected exclusively by the majority of part-time faculty respondents. In the learning skills category, the majority of part-time faculty respondents selected "focusing" and "retaining over time" while the majority of full-time faculty respondents selected such skills as "synthesizing" and "creating." In the psycho-social category, the majority of part-time faculty respondents selected "perseverance" while the majority of full-time faculty respondents selected such skills as "knowing when help is needed" and "effective verbal communication."

In the category of psycho-social and external barriers, there was no barrier selected as significant by both sub-samples. The majority of full-time faculty respondents selected only "time to study" as a significant barrier for most of the remedial students whom they instructed, while the majority of part-time faculty respondents selected "employment demands" and "family and domestic demands" as significant barriers. Although these barriers appear on the surface to be different, they all address the same problem of limited time to devote to one's studies.

When the survey instrument was constructed, two "other" items were added to each part (category) of the instrument: learning skills, psycho-social skills, and psycho-social and external barriers. This option provided an open avenue for respondents to add skill needs or barriers (which they perceived as affecting and/or significantly affecting most of the remedial students whom they instructed) that were not included in the original list of skills and barriers presented for their consideration.

Only three respondents used the "other"items. One full-time faculty respondent perceived "low motivation" as a significant psycho-social barrier. One part-time faculty respondent perceived "forming hypotheses" as a learning skill needed, but not significantly needed, by most of the remedial students whom (s)he instructed. Another part-time faculty respondent perceived "language barriers" and "socio-cultural barriers" as significant barriers for most remedial students whom (s)he instructed.

CONCLUSIONS

Four conclusions can be drawn from the results of this exploratory study. First, faculty members who instruct remedial students are able to identify specific learning skills and psycho-social skills which they perceive to be needed by most of their students. Among these identified skill needs, faculty members are further able to distinguish significant skill needs (those needs requiring immediate attention).

Second, faculty members who instruct remedial students are able to identify specific psycho-social and external situations which they perceive to be barriers to the academic success of most of their students. Among these identified barriers, faculty members are further able to

distinguish significant barriers (situations requiring immediate attention).

Third, it is possible to rank the overall and significant skill needs of and overall and significant barriers for most remedial students by applying a variation ratio analysis to an aggregate measurement of faculty responses obtained through a reliable and valid survey instrument. As in most exploratory research, the survey instrument was constructed by a panel of experts. Its prima facia reliability and validity, assumed at the outset of the study, were supported by (a) the ease with which faculty respondents completed the instrument, (b) the concentrations of aggregate responses, and (c) the minimal number of items added to the instrument through the use of the "other" items offered in each section of the instrument (only three respondents added a total of four "other" responses).

Fourth, the research presented in this report points to differences in perception between the majority of full-time faculty members and the majority of part-time faculty members with respect to the general educational skill needs of and barriers experienced by most of the remedial students whom they instruct. The differences between the two groups of respondents took two forms.

The most frequent form of difference was in the ranking of a skill need or barrier perceived as affecting most of the remedial students. For example, "analyzing" was ranked by the majority of full-time faculty members as the top learning skill needed by students, whereas the majority of part-time faculty members ranked "retaining over time" as the top leaning skill need by students. Only 80% of the part-time faculty respondents selected "analyzing" as a skill need while 100% of the full-time faculty respondents did so. Of the part-time faculty respondents, 90% selected "retaining over time" as a skill need while 67% of the full-time faculty respondents agreed.

Another more radical form of difference between the groups of faculty respondents occurred in the selection of significant skill needs and barriers. In the category of learning skills, the majority of full-time faculty respondents selected three skill needs which were not selected by the majority of part-time faculty respondents who selected one skill need which was not identified by the majority of full-time faculty respondents. In the category of psycho-social skills, the difference between the majorities of the two groups of respondents was greater with

the majority of full-time faculty respondents selecting five skill needs not identified by the majority of part-time faculty respondents who selected two skill needs which were not identified by the majority of full-time faculty respondents.

IMPLICATIONS

The results and conclusions of this exploratory study point to three, important implications. First, remedial programs which focus solely on the development of subject matter skills in reading, writing, and mathematics among remedial students may not offer the best approach to ensuring the academic success of such students. The development of more general educational skills -- learning skills and psycho-social skills -- by remedial students prior to or in association with subject matter skills may produce greater academic success.

Second, the majority of faculty members who instruct remedial students appear to have a clear picture of the overall and significant learning and psycho-social skills which these student need to be academically successful. More effort should be given (a) to polling faculty members who instruct remedial students for their perceptions on their students' skill needs and (b) to implementing skills development activities which address these perceived needs.

Third, the majority of full-time faculty members and the majority of part-time faculty members who instruct remedial students appear to have somewhat divergent perceptions of the significant skill needs of students, many of whom they both instruct. This divergence of perceptions may be the result of minimal contact (association) between the two groups, a situation whose resolution could only further benefit remedial students.

Fourth, the top barrier to the academic success of remedial students appears to be "time available to pursue their studies." This is new ground to be considered by community colleges. To ensure that most remedial students have the basic opportunity to become academically successful, colleges have to address the students' need for adequate study time. Providing the access to instruction and other resources alone falls short as a complete formula for academic success. Remedial students need to be helped to extend their available study time.

RECOMMENDATIONS

Three directions in further research are recommended. First, the survey instrument developed for this exploratory research should be tested for usefulness at other colleges.

Second, the relationship between the relative separation of the majority of part-time faculty members from the majority of full-time faculty members and their differing perceptions of student needs should be explored further. The separation of two faculties who teach the same courses may be producing qualitatively different teaching-learning approaches which may adversely affect the education of students, especially in the area of certain general and/or disciplinary skills.

Third, there should be more exploration into the use of surveys to inventory the perceptions of faculty members. Such practitioner-based research can provide results which may be immediately usable to improve student services, courses, or programs and increase student success.

REFERENCES

Altbach, P., & Berdahl, R. (Eds.). (1981). Higher education in American society. Buffalo, New York: Prometheus Books.

Barr, M., Keating, L., & Associates. (1990). Developing effective student services programs. San Francisco, California: Jossey-Bass Publishers.

Brock, W. (1991, February/March). "Continuous training for the high skilled workforce." AACJC Journal. 61(4). 21-25.

Brubacher, J., & Rudy, W. (1958). Higher education in transition: An American history. New York, New York: Harper & Brothers Publishers.

Cohen, A., & Brawer, F. (1989). The American community college. San Francisco, California: Jossey-Bass Publishers.

Conant, J. (1967). The comprehensive high school. New York, New York: McGraw-Hill Book Company.

Cremini, L. (1977). Traditions of American education. New York, New York: Basic Books, Inc.

Cross, K. P. (1976). Beyond the open door. San Francisco, California: Jossey-Bass Publishers.

Flexner, A. (1930). Universities: American English German. New York, New York: Oxford University Press.

Fradlin, B., & Hisle, W. (1993, April/May). "Harnessing the future: Administrative support for learning resources." AACJC Journal. 63(5). 24-29.

Franke, T. (1991-92, December/January). "Developmental education, the liberal arts, & diversity." AACJC Journal. 62(3). 21-24.

Gardner, B. (1993, June/July). "Building communities for the world of tomorrow: 73rd annual AACC convention." AACJC Journal. 63(6). 34-37.

Good, H. (1960). A history of western education. New York, New York: The Macmillan Company.

Howard Community College. (1991, November). Assessing student learning outcomes: Performance accountability report. Columbia, Maryland: Howard Community College. (ERIC Document Reproduction Service No. ED 337 227)

Katsinas, S., & Swender, H. (1992, June/July). "Community college and JTPA: Involvement and opportunity." AACJC Journal. 62(6). 18-23.

Kempner, K. & Connett, D. (1990, Spring/Summer). "Social responsibility in community colleges: Rethinking the commitment to alternative education." Innovative Higher Education. 14(2). 83-92.

Kent, N. (1991, February/March). "Partners for the future: Business and community colleges team up." AACJC Journal. 61(4). 31-35.

Lieberman, N. S. & Vaugon, S. A. (1990). Student services and retention for welfare students. New York: Tompkins Cortland Community College. (ERIC Document Reproduction Service No. ED 325 176)

Nielsen, N. (1991, April/May). "Responding to the new student diversity." AACJC Journal. 61(5). 45-48.

Parnell, D. (1991, June/July). "Keeping promises." AACJC Journal. 61(6). 14-19.

Pounds, R. (1968). The development of education in western culture. New York, New York: Appleton, Century & Crofts.

Pulliam, J. (1982). History of education in America, third edition. Columbus, Ohio: Charles E. Merrill Publishing Company.

Roueche, S., & Roueche, J. (1993, April/May). "Making good on the promise." AACJC Journal. 63(5). 18-23.

Walleri, D., Seybert, J., & Cosgrove, J. (1992, February/March). "What do students want?" AACJC Journal. 62(4). 28-31.

Witherspoon, D., & Nickell, E. (1991). Back to school at my age? New York, New York: University Press of America.

Wolfe, G. (1993, February/March). "Recruiting minorities into teaching: A joint registration model." AACJC Journal. 63(4). 32-35.

Zins, J., Curtis, M., Graden, J., & Ponti, C. (1988). Helping students succeed in the regular classroom. San Francisco, California: Jossey-Bass Publishers.

Cover Memo and Survey Instrument

TO: Academic Skills Faculty

FROM: Division Chairman

SUBJECT: Survey on Developmental Student Needs and Possible Barriers to Academic Success

The survey is attached. Its purpose is to gather your input on (a) the learning needs and supporting psycho-social needs which you believe the students have and (b) the psycho-social and external barriers to academic success with which your students struggle. The goal of the study is to provide a data base from which MCCC can develop focused and effective developmental instruction and support services.

The survey has three parts which ask for your perceptions. An example of what you are asked to do is below.

Example	Column I Overall Need	Column II Significant Need
Learning Skill	X	X

Please complete the survey and return it on or before the end of the semester. Thank you for your participation in this very important study.

Part 1: Below is a list of words and phrases describing the learning skills which are needed to be academically successful. In Column I, please mark the skills which you feel the majority of your students need to develop. In Column II, please mark the skills for which most of your students require immediate attention.

Learning Skill	Column I Needed By My Students	Column II A Significant Need
Classifying		
Discriminating		
Focusing		
Memorizing		
Retaining over time		
Analyzing		
Brainstorming		
Combating irrational ideas		
Comprehending		
Explaining		
Framing answers		
Gathering evidence		
Generalizing		
Integrating		
Outlining		
Summarizing		
Synthesizing		
Verifying		
Acting on reasoned opinion		
Challenging		
Creating		
Defending		
Exploring		
Framing questions		
Judging truth		
Judging values		
Other_____		
Other _____		

Part 2: Below is a list of words and phrases describing the psycho-social skills which are needed to be academically successful. In Column I, please mark the skills which you feel the majority of your students need to develop. In Column II, please mark the skills for which most of your students require immediate attention.

Psycho-Social Skill	Column I Needed By My Students	Column II A Significant Need
Adjusting to the campus		
Adjusting to role of student		
Notetaking		
Perseverance		
Good study habits		
Time management		
Knowing what to study		
Asking questions		
Knowing when help is needed		
Stress management		
Effective verbal communication		
Acceptance of givens		
Achievement orientated		
Following directions		
Information sorting		
Knowing where to get help		
Understanding of task/job		
Active orientation		
Handling failure		
Well-developed goals		
Self-confidence		
Self-control		
Self-evaluation		
Networking		
Test-taking		
Other_____		
Other _____		

Part 3: Below is a list of words and phrases describing the psycho-social and external barriers to academic success. In Column I, please mark the barriers with which you feel the majority of your students struggle. In Column II, please mark the barriers which you feel are the most significant (those which require the most immediate attention).

Barrier	Column I Affects Most of My Students	Column II A Significant Barrier
Bus schedules		
Car problems		
Reliance on rides		
Family and domestic demands		
Child care		
Spouse's antagonism		
Disability		
Employment demands		
Extreme anxiety		
Illness		
Limited funds		
Psychological discomfort		
Religious dilemmas		
Time to study		
Place to study		
Vague career plans		
Other_____		
Other _____		

THANK YOU FOR YOUR PARTICIPATION. PLEASE RETURN YOUR COMPLETED SURVEY TO LB 221.